

REMARKSStatus of the Claims

Claims 1 and 4-9 are pending in this application. Claims 2 and 3 have been canceled. Claims 4-9 have been added. Support for claims 4-9 is found at pages 7, 10 and 12 of the specification. Claim 1 has been amended to incorporate the subject matter of claims 2 and 3 into claim 1. Applicants submit that no new matter has been added by the above claim amendments.

Objection to Drawings

The Examiner objects to the specification for not containing a drawing of the claimed invention. Applicants submit that the present invention is particularly and distinctly claimed and described in the specification without drawings. No drawing is necessary to adequately disclose the invention to the public. The invention lies not in the arrangement of the layers of the golf ball, but instead in the materials that make up the layers of the golf ball. It is the specific materials that contribute to the golf balls deformation properties and excellent characteristics. These attributes of the claimed golf ball cannot be illustrated in a drawing. Also note MPEP 608.02, pp. 600-86 to 600-87, which states that a laminated article, as in the present situation, does not typically require drawings. As such, Applicants respectfully request that the objection be withdrawn.

Rejection under 35 USC 102(e)

The Examiner rejects claims 1-3 as anticipated by Rajagopalan USP 6,207,784. Applicants traverse the rejection and respectfully request the withdrawal thereof.

The present invention is directed to a golf ball composed of a core and cover, where the core is formed from a rubber composition containing cis-1,4-polybutadiene as the base rubber and the cover is formed from a thermoplastic polyurethane elastomer using alicyclic diisocyanate that is selected from a group consisting of 4,4'-dicyclohexylmethane diisocyanate, 1,3-bis(isocyanatomethyl)cyclohexane, isophorone diisocyanate and trans 1,4-cyclohexyl diisocyanate. The core has a deformation of 2.4 to 4.5 mm (98 to 1275 N). The entire ball has a deformation of 2.4 to 4.0 mm (98 to 1275 N).

The golf ball of Rajagopalan '784 has a cover and core. At least one the cover or core is formed from an anionic polyurethane ionomer or copolymer containing alicyclic diisocyanate. The anionic group is a sulfonic or carboxylic group.

Applicants submit that the golf ball of the present invention is distinguished from the golf ball of Rajagopalan

'784. The polyurethane polymer of the present invention does not contain an anionic group. Thus, Applicants submit that the materials of the respective golf balls are not identical, thus the golf ball of Rajagopalan '784 will not necessarily have the deformation properties recited in the present invention.

The specific alicyclic diisocyanate of the present invention provides the ball with good shot feel, good controllability, high rebound characteristics, excellent scuff resistance, good yellowing resistance and good productivity. See for example the comparative examples in the specification. The comparative examples in the specification demonstrate that only the specific alicyclic diisocyanate of the present invention yields the desired properties listed above. Since, the golf ball of Rajagopalan '784 fails to use the specific alicyclic diisocyanate of the present invention, the golf ball of Rajagopalan '784 also fails to yield the specific properties and characteristics of the present invention. Thus, Applicants submit that the rejection should be withdrawn as Applicants have shown that the golf ball of Rajagopalan '784 is not composed of the same materials as the golf ball of the present invention and thus, does not possess the same characteristics and properties of the golf ball of the present invention.

Conclusion

As Applicants have addressed and overcome the objection and rejection of the Office Action by amendment and argument, Applicants respectfully request that the objection and rejection be withdrawn and the claims allowed.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$110.00 is attached hereto.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ms. Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

(Rev. 02/20/02)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 2 and 3 have been canceled.

The claims have been amended as follows:

Claim 1. (Amended) A golf ball comprising a core and a cover covering the core, wherein the core is formed from a rubber composition comprising cis-1,4-polybutadiene and the cover comprises polyurethane-based thermoplastic elastomer formed by using cycloaliphatic diisocyanate as a base resin selected from the group consisting of 4,4'-dicyclohexylmethane diisocyanate, 1,3-bis (isocyanatomethyl)cyclohexane, isophorone diisocyanate, and trans-1,4-cyclohexane diisocyanate;

and the core has a deformation amount of 2.5 to 4.5 mm, when applying from an initial load of 98 N to a final load of 1275 N on the core, and

the golf ball has a deformation amount of 2.4 to 4.0 mm, when applying from an initial load of 98 N to a final load of 1275 N on the golf ball.

Claims 4-9 have been added.